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EXAMINER

SASTRI, SATYA B

ART UNIT PAPER NUMBER

1713

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/830,730

Applicant(s)

ASSMANN ET AL.

Examiner

Satya B Sastri

Art Unit

1713

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-35 is/are allowed.
- 6) ☒ Claim(s) 36-39 and 47 is/are rejected.
- 7) ☒ Claim(s) 40-46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

1. This office action is in response to the paper no. 4 of the application filed on April 30, 2001. Acknowledgement is made of the cancellation of *claims 1-16* and addition of new *claims 17-47*. *Claims 17-47* are now pending in the application.

Specification

2. *Claim 17* has a missing word in line 7.
3. *Claims 17-47* allude to “soluble polymer granules”. However, “water soluble polymer granules” may be more specific or appropriate.

Appropriate corrections are required.

Claim Rejections - 35 USC § 102 and 103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. *Claims 36-38 and 47* are rejected under 35 U.S.C. 102(b) as being anticipated by Denzinger et al. (US 4,698,174).

The prior art to Denzinger et al. relates to pulverulent and/or **granular additives** for detergent and cleaning agents, consisting of (a) from **80 to 20% by weight** of one or more **copolymers** comprising from about 40 to 90% by weight of **(meth)acrylic acid** and from 60 to 10% by weight of maleic acid and/or one or more copolymers comprising from 10 to 45% by weight of (meth)acrylic acid, from 10 to 45% by weight **maleic acid** and from 10 to 60% by weight of one or more hydroxyalkyl (meth)acrylate, if appropriate in the form of a partially or completely neutralized water-soluble salt, (b) **from 20 to 80% by weight of nitroacetic acid** or its salt and (c) **0 to 20% by weight of one or more additives conventionally used for detergent and cleaning agent** (abstract). Thus, *claims 36-38 and 47* are anticipated by Denzinger et al.

7. *Claim 39* is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Denzinger et al. (US 4,698,174).

The prior art to Denzinger et al. is disclosed in paragraph 6 above and is incorporated herein by reference. The prior art does not disclose details on the molecular weight of the soluble

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polycarboxylate copolymer. However, given the broad range of the molecular weight in the instant claim (*claim 39*), a reasonable basis exists to believe that the prior art polymer would inherently have molecular weight within the claimed range. It has been held that where applicant claims a composition in terms of function, property or characteristic where said function is not explicitly shown by the reference and where the examiner has explained why the function, property or characteristic is considered inherent in the prior art, it is appropriate for the examiner to make a rejection under both the applicable section of 35 USC 102 and 35 USC 103 such that the burden is placed upon the applicant to provide clear evidence that the respective compositions do in fact differ. *In re Best*, 195 USPQ 430, 433 (CCPA 1977); *In re Fitzgerald et al.*, 205 USPQ 594, 596 (CCPA 1980).

Allowable Subject Matter

8. *Claims 17-35* are allowed.
9. *Claims 40-46* are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. The following is an examiner's statement of reasons for allowance:

The present claims are allowable over the closest reference to Denzinger et al. (US 4,698,174) and Sato et al. (US 4,386,120).

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The present invention discloses a process for production of soluble polymer granules comprising the steps of simultaneously granulating and drying, in a fluidized bed dryer having a diffusor plate, a water-based preparation comprising at least 30% by weight of one or more water soluble polymers, in which drier with one or more air inlets above the diffusor plate produces an eddy flow in the bed about the vertical axis.

The prior art to Denzinger et al. discloses a process for the production of water-soluble polymer granules in a fluidized bed by drying in a fluidized bed but does not disclose the fluidized bed dryer as having a diffusor plate with air inlets above the diffusor plate to produce an eddy flow in the bed about the vertical axis. Additionally, the prior art teaches soluble polymer granules based on (meth)acrylic acid or maleic acid but does not teach granule granule composition based on copolymers of vinyl pyrrolidone or soluble (co)polymers with additives such as dextrin or inorganic carriers.

The prior art to Sato et al. discloses a process or producing polyacrylic acid salt granules by fluidized bed granulation device that include fluidized bed, modified fluidized bed type or jet bed type (column 2) but do not teach fluidized bed dryer having a diffusor plate, a water-based preparation comprising at least 30% by weight of one or more water soluble polymers, in which drier with one or more air inlets above the diffusor plate produces an eddy flow in the bed about the vertical axis.

Therefore, the instantly claimed invention is deemed allowable over the closest prior art of record as per said art neither anticipating nor rendering obvious the instantly claimed process for production of soluble polymer granules or the composition. There is no teaching or suggestion or motivation to modify the prior art processes or compositions.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (703) 305-8490.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached at (703) 308-2450.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 308-0661.

SATYA SASTRI

October 21


DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700